

U.S. Serial No. 10/000,188
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AMENDMENTS TO THE CLAIMS

Claims 1-11 (cancelled)

Claim 12 (original) A solvent dewaxing process comprises:

- (a) contacting a waxy oil with cold dewaxing solvent to form a dewaxed oil and wax, both of which contain said dewaxing solvent;
- (b) heating said solvent containing dewaxed oil and wax and then passing same to separate solvent recovery fractionators to separate and recover said solvent;
- (c) passing said hot recovered dewaxing solvent produced in (b) into a solvent line that passes it to solvent chillers downstream of said fractionators and wherein said hot solvent is cooled back down to the cold dewaxing temperature in said chillers and recycled back to solvent dewax more waxy oil;
- (d) passing a slipstream of said hot recovered solvent from said line upstream of said chillers into a solvent loop containing a sample chamber and into said chamber without exposing said sample to the ambient, wherein said chamber contains wax crystal detecting means comprising a laser beam that is reflected by wax crystals focused at a point in said sample in said chamber, wherein wax crystals forming in said sample that pass through said focal point reflect said beam, and wherein said reflections are detected and recorded as indicating the presence of said wax crystals in said sample, and
- (e) cooling said sample in said chamber under conditions of relative motion between said beam and sample down to a predetermined temperature or until wax crystals form and are detected, and recording the temperature at which they form under conditions that provide relative movement between said beam and sample.

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Claim 13 (original) A dewaxing process according to claim 12 wherein the temperature at which said wax crystals form is automatically recorded and wherein if the temperature at which said wax crystals form is too high, one or more operators are alerted and corrective measures are taken upstream of said chillers to prevent them from being fouled with wax.

Claim 14 (original) A dewaxing process according to claim 13 wherein said laser beam comprises visible light radiation.

Claim 15 (original) A dewaxing process according to claim 14 wherein said solvent loop is attached and adjacent to said solvent line.

Claim 16 (original) A dewaxing process according to claim 15 wherein said steps (d) and (e) are accomplished by remote control at a control point remote of said solvent loop and chamber.

Claim 17 (original) A dewaxing process according to claim 16 wherein said steps (d) and (e) are automatically repeated at predetermined intervals.

Claim 18 (original) A dewaxing process according to claim 17 wherein said solvent sample is passed back into said solvent line via said loop after steps (d) and (e) have been achieved.

Claim 19 (original) A dewaxing process according to claim 18 wherein said sample in said chamber is at the same conditions of temperature and pressure as said hot solvent in said line before it is cooled.

Claim 20 (original) A dewaxing process according to claim 19 wherein said dewaxed oil comprises a lubricating oil fraction.